

McGraw-Hill Mathematics
Publisher: Macmillan/McGraw-Hill

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Content Level: Math

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Overall Strengths and/or Weaknesses

Disclaimer: Comments on the strengths and/or weaknesses of each book or program were written by members of the State Textbook/Instructional Materials Review Team and reflect their opinions. They do not reflect the opinions of the State Textbook Commission nor the Kentucky Department of Education. In addition, the State Textbook/Instructional Materials Review team completed each evaluation form during the week of July 8-12, 2002. In order to maintain the integrity of the review team's comments, editing was limited to spelling and punctuation.

CONTENT/PROCESS

Strengths: The text shows a wide representation of cultures. The Spiral Review, Test Prep, and follow-up practices are included in each chapter. The Teacher's Edition contains suggestions on teaching to various learning styles, interest/ability levels, and intelligences.

Weaknesses: The text has limited adaptations and accommodations for special needs students. The Lesson Planner that contains the Kentucky Program of Studies and Kentucky Core Content was not available in the Kindergarten level.

ASSESSMENT

Strengths: The practice pages and testing pages are consistently in the same format. Age appropriate performance assessments are included for each chapter.

Weaknesses: The technology tools are not included in the package but can be purchased.

ORGANIZATION AND STRUCTURE

Strengths: Each chapter includes a spiral review and test prep. New vocabulary words are highlighted in context and featured in a Math Word Box for that lesson. The texts also include a glossary. The text size is age appropriate and the layout is well organized.

Weaknesses: The Kindergarten level does not correlate pages between the Teacher's Edition and Student text.

STUDENT EXPERIENCES

Strengths: There are journal prompts and portfolio activities to promote writing.

Weaknesses: The connections across the curriculum are limited.

TECHNOLOGY

Strength: There are calculator activities included in the textbook as well as a website address.

Weaknesses: The student materials are available on line but it may take several minutes to download the Macromedia Shockwave and Flash components in order to run the program. There were no technological media included but they can be purchased.

RESOURCE MATERIALS

Strengths: The correlation between teacher and student page numbers are present in all grade levels except Kindergarten.

Weaknesses: The technological media are not included but may be purchased. The special needs students adaptation and accommodations are limited.

If this material is available in digital format, KDE strongly recommends that it be considered if there are students in the school who have a need for this type of material. **Is Not Available in digital format**

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Recommended by reviewers to State Textbook Commission as a basal textbook or program.

OTHER COMMENTS:

PUBLISHER'S EXPLANATION OF REVIEWERS' COMMENTS

(By action of the State Textbook Commission, publishers are being provided limited space, 150 words, to respond to what they may consider factual errors made by the reviewers in the written evaluation.)

STANDARDS FOR MATHEMATICS EVALUATION INSTRUMENT

Content/Process

- 1. Material is comprehensive and includes content emphasized in Kentucky's Learning Goals and Academic Expectations and supported by the Core Content for Assessment, Program of Studies, and relevant National Standards.**

Rating: Strong

Comments: The Lesson Planner that contains the Kentucky Program of Studies and Kentucky Core Content was not available in the Kindergarten level.

- 2. Content appears to be free from factual errors.**

Rating: Strong

Comments: The Lesson Planner that contains the Kentucky Program of Studies and Kentucky Core Content was not available in the Kindergarten level.

- 3. Content makes connections to other content areas across the curriculum.**

Rating: Strong

Comments: The Lesson Planner that contains the Kentucky Program of Studies and Kentucky Core Content was not available in the Kindergarten level.

- 4. Concepts and application of skills to real-life situations are introduced when appropriate.**

Rating: Strong

Comments: The Lesson Planner that contains the Kentucky Program of Studies and Kentucky Core Content was not available in the Kindergarten level.

- 5. Content appears to be free of social, ethnic, racial, religious, gender, and geographic bias.**

Rating: Strong

Comments: The Lesson Planner that contains the Kentucky Program of Studies and Kentucky Core Content was not available in the Kindergarten level.

6. Material is flexible and accommodates various learning styles, interest/ability levels, and intelligences, including adaptations and accommodations for students with special needs.

Rating: Strong

Comments: The Lesson Planner that contains the Kentucky Program of Studies and Kentucky Core Content was not available in the Kindergarten level.

7. Reading level is appropriate for interest and ability level of intended student group; level remains consistent throughout.

Rating: Strong

Comments: The Lesson Planner that contains the Kentucky Program of Studies and Kentucky Core Content was not available in the Kindergarten level.

8. Content reflects research-based practices (e.g., hands-on activities, technology, problem-solving situations).

Rating: Strong

Comments: The Lesson Planner that contains the Kentucky Program of Studies and Kentucky Core Content was not available in the Kindergarten level.

9. Concepts are explored in depth and reinforced throughout.

Rating: Strong

Comments: The Lesson Planner that contains the Kentucky Program of Studies and Kentucky Core Content was not available in the Kindergarten level.

Assessment

1. Student assessment is aligned with the instructional program. Assessment activities are similar to learning activities.

Rating: Strong

Comments: The practice pages and testing pages are consistently in the same format. Age appropriate performance assessments are included for each chapter.

2. Assessment activities examine the extent to which students have internalized and made sense of mathematical concepts and whether they can use mathematics to communicate their ideas.

Rating: Strong

Comments: The practice pages and testing pages are consistently in the same format. Age appropriate performance assessments are included for each chapter.

3. Assessment activities provide opportunities for students to demonstrate knowledge and skills in real-life situations and interdisciplinary applications.

Rating: Strong

Comments: The practice pages and testing pages are consistently in the same format. Age appropriate performance assessments are included for each chapter.

4. A variety of assessments (e.g., diagnostic, formative, summative, open response, multiple choice, individual, small group, oral, demonstrations, presentations, self and peer, performance, portfolio prompts) is included.

Rating: Strong

Comments: The practice pages and testing pages are consistently in the same format. Age appropriate performance assessments are included for each chapter.

5. Assessment activities provide opportunities for student integration of technology in the assessment process.

Rating: Strong

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Comments: The practice pages and testing pages are consistently in the same format. Age appropriate performance assessments are included for each chapter.

10. A variety of assessments (e.g., diagnostic, formative, summative, open response, multiple choice, individual, small group, oral, demonstrations, presentations, self and peer, performance, portfolio prompts) is included.

Rating: Strong

Comments: The practice pages and testing pages are consistently in the same format. Age appropriate performance assessments are included for each chapter.

11. Assessment activities provide opportunities for student integration of technology in the assessment process.

Rating: Strong

Comments: The practice pages and testing pages are consistently in the same format. Age appropriate performance assessments are included for each chapter.

Organization and Structure

1. Organization is logical and allows for spiraling of content.

Rating: Strong

Comments:

2. Language is clear and concise with correct grammar and sentence structure.

Rating: Strong

Comments:

3. Vocabulary and key terms are clearly defined and easily accessible within each lesson.

Rating: Strong

Comments:

4. Visual illustrations (e.g., graphs, charts, models) and examples are clearly presented and content-related.

Rating: Strong

Comments:

5. Illustrations and language reflect diversity (e.g., racial, ethnic, cultural, age, gender, disabilities).

Rating: Strong

Comments:

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6. Legible type, length of lines, spacing, page layout, and width of margins contribute to overall appearance and use.

Rating: Strong

Comments:

7. Student materials seem durable and conducive to daily student use (e.g., size, weight).

Rating: Strong

Comments:

8. Textbook includes appropriate and sufficient glossary, index, and appendices.

Rating: Strong

Comments:

9. Materials are organized into units of study (or similar structures) with daily lessons that include worthwhile, real-world tasks.

Rating: Strong

Comments:

10. Materials can be easily understood by students and parents.

Rating: Strong

Comments:

Student Experiences

1. The program emphasizes students *doing* mathematics rather than *memorizing* mathematics.

Rating: Strong

Comments:

2. Both group and individual activities are included.

Rating: Strong

Comments:

3. Materials and activities provide authentic applications that allow students to make meaningful connections across the curriculum, to real-world situations, and to interrelated mathematical concepts.

Rating: Strong

Comments:

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4. Materials and activities encourage students to explore and investigate mathematical ideas through various problem-solving techniques.

Rating: Strong

Comments:

5. Materials and activities encourage students to read, write, and discuss mathematics.

Rating: Strong

Comments:

6. Materials and activities ask students to reflect upon, clarify, justify, and generalize their mathematical ideas.

Rating: Strong

Comments:

Technology

1. In order for students to focus on decision-making, reflection, reasoning, and problem solving, instructional activities incorporate the use of technology (e.g. calculators, probes, computers) and include instructions on how to use the technology tools.

Rating: Weak

Comments: There are calculator activities included in the textbook as well as a website address. However, the CDs are ancillary and must be purchased. The ancillary CDs are teacher and student friendly. These materials would be very good supplemental classroom tools. However, with the Math Traveler for first grade software had to be rebooted twice. The Math Tool Chest (primary grades) was not easy to install and appears to be better for Grades 4-5. It would be difficult to maneuver for some primary students.

2. Various forms of media are included (e.g., CDs, videos, computer software).

Rating: Weak

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3. Student materials are available online.

Rating: Weak

Comments: There are calculator activities included in the textbook as well as a website address. However, the CDs are ancillary and must be purchased. The ancillary CDs are teacher and student friendly. These materials would be very good supplemental classroom

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Resource Materials

- 1. Teacher materials coordinate easily with student materials (e.g., additional resources included at point of need, student pages shown, manipulatives appropriate for indicated lesson, instructional technology indicated).**

Rating: Strong

Comments: The Kindergarten Teacher's Edition and Student pages are not the same page numbers.

- 2. Activities are included that adapt to the various learning styles, intelligences, and interest/ability levels.**

Rating: Strong

Comments: The Kindergarten Teacher's Edition and Student pages are not the same page numbers.

- 3. Extension activities including adaptations and accommodations for students with special needs.**

Rating: Strong

Comments: The Kindergarten Teacher's Edition and Student pages are not the same page numbers.

- 4. Resources provide objectives, background information, common student errors, hints, advice for lesson implementation and real-world connections, connections within mathematics, and references (e.g., solutions manuals, study guides).**

Rating: Strong

Comments: The Kindergarten Teacher's Edition and Student pages are not the same page numbers.

- 5. Suggestions are made for integration of themes and/or interdisciplinary instruction.**

Rating: Strong

Comments: The Kindergarten Teacher's Edition and Student pages are not the same page numbers.

- 6. Suggestions are made for family and community involvement and school/home communication.**

Rating: Strong

Comments: The Kindergarten Teacher's Edition and Student pages are not the same page numbers.

- 7. The included media are durable, easy to use, and have technical merit.**

Rating: Strong

Comments: The Kindergarten Teacher's Edition and Student pages are not the same page numbers.

- 8. Teacher resources are available online.**

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